MOTOROLA SOLUTIONS

MOTOTRBO™
DEP™ 500e SERIES

YOU'RE BETTER, CONNECTED

With this dynamic evolution of MOTOTRBO digital two-way radios, you're better connected, safer and more efficient. The DEP™ 500e Series is designed for the everyday worker who needs effective communications. With systems support and loud, clear audio, these next-generation radios deliver cost-effective connectivity to your organization.

CONNECTED

The MOTOTRBO DEP™ 500e Series is a family of DMR standard digital radios that delivers operations-critical voice communications. Bluetooth®* audio lets you talk without wires, integrated Wi-Fi enables remote management, and indoor location-tracking capabilities give you total visibility of your resources. With support for basic trunking as well as legacy analog technology, you can keep your organization connected as it grows.

SAFE

The DEP™ 500e Series is designed to improve safety in your organization, with the rapid response capability of instant push-to-talk communications. Even if a worker is unresponsive, you can remotely activate the radio to check status. Privacy options are available to protect your communications, and radios can be remotely disabled if they are suspected stolen. New HazLoc models are available for use in areas where flammable or explosive materials are present.

EFFICIENT

With new noise cancellation technology and improved clarity, the DEP™ 500e Series delivers excellent audio quality to make your workplace communications clearly intelligible. The latest energy technology delivers up to 27 hours of battery life for 3-shift working, and the optional IMPRES Over-the-Air Battery Management tool helps you maximize cell lifetime. An improved receiver boosts range by up to 8%, allowing you to reach further than ever.

*Available in R2.8

WHAT'S NEW IN THESE NEXT GENERATION RADIOS

SAFER

- Bluetooth® 4.0 with indoor location tracking capability
- HazLoc models available for use in flammable or explosive environments

MORE EFFICIENT

- Integrated Wi-Fi with over-the-air firmware update capability
- Upgraded audio for greater clarity at high volume
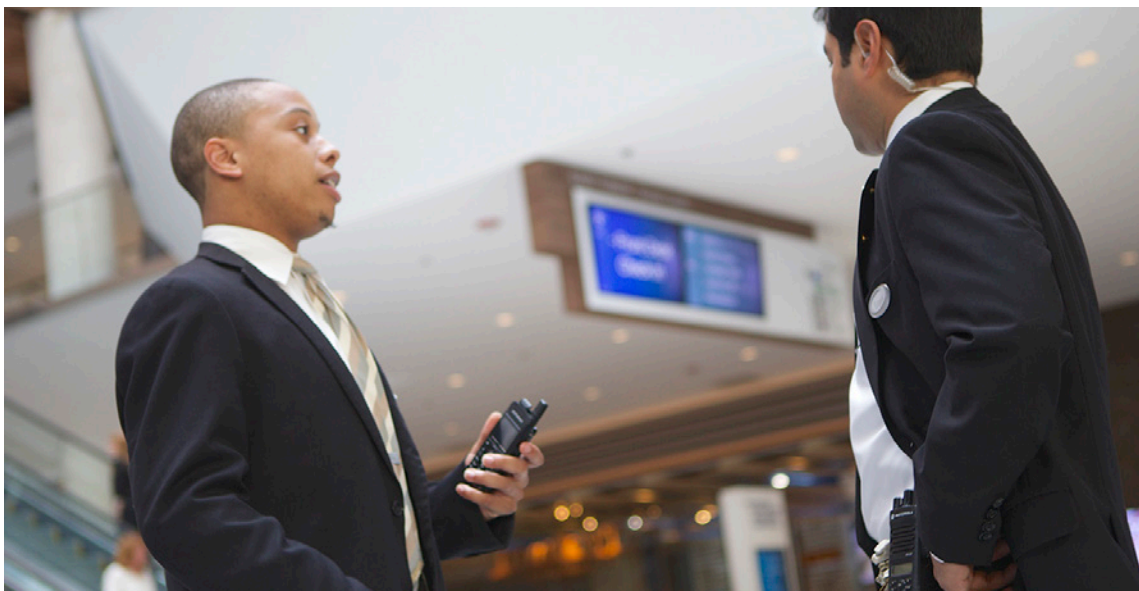- Improved expandability for future features

MORE EFFECTIVE

- New energy technology for up to 27 hours battery life
- Improved receiver for up to 8% greater range
- IP67 rating for improved resistance to dust and water

	Limited Keypad (LKP) Model			No Keypad (NKP) Model		
Model Number	DEP 570e			DEP 550e		
Band	VHF	350	UHF	VHF	350	UHF
GENERAL SPECIFICATIONS						
Frequency	136-174 MHz	350-400 MHz	403-527 MHz	136-174 MHz	350-400 MHz	403-527 MHz
High Power Output	5 W	4 W	4 W	5 W	4 W	4 W
Low Power Output	1 W	1 W	1 W	1 W	1 W	1 W
Channel Spacing	12.5, 20, 25 kHz					
Channel Capacity	128			32		
Dimensions (H x W x D), Radio + Standard Battery	4.8 x 2.2 x 1.4 in (122 x 56 x 36 mm)					
Weight, Radio + Standard Battery	10 oz (281 g)			9 oz (264 g)		
Dimensions (H x W x D), Radio + High Capacity Battery	4.8 x 2.2 x 1.7 in (122 x 56 x 42 mm)					
Weight, Radio + High Capacity Battery	11 oz (309 g)			10 oz (292 g)		
FCC Description	AZ489FT7069	-	AZ489FT7068	AZ489FT7069	-	AZ489FT7068
Digital / Analog Battery Life[1], Slim 1600 mAh Battery	15.5 / 11.0 hrs	14.5 / 11.0 hrs		15.5 / 11.0 hrs	14.5 / 11.0 hrs	
Digital / Analog Battery Life[1], High Capacity 3000 mAh Battery	28.5 / 21.0 hrs	27.5 / 21.0 hrs		28.5 / 21.0 hrs	27.5 / 21.0 hrs	
Power Supply (Nominal)	7.5 V					
Frequency Stability	± 0.5 ppm					

ALL MODELS

TRANSMITTER SPECIFICATIONS

Modulating Limiting	± 2.5 kHz @ 12.5 kHz / ± 5.0 kHz @ 25 kHz[3]
Hum and Noise	-40 dB (12.5 kHz channel), -45 dB (25 kHz channel)
Conducted Spurious Emissions (TIA603D)	-57 dBm
4FSK Digital Modulation	12.5 kHz Data: 7K60F1D and 7K60FXD, 12.5 kHz Voice: 7K60F1E and 7K60FXE, Combination of 12.5 kHz Voice and Data: 7K60F1W
Digital Protocol	ETSI TS 102 361-1, -2, -3
Conducted/Radiated Emissions (TIA603D)	-36 dBm < 1GHz, -30 dBm > 1GHz
Adjacent Channel Power	60dB (12.5 kHz channel), 70dB (25* kHz channel)

RECEIVER SPECIFICATIONS

Modulating Limiting	± 2.5 kHz @ 12.5 kHz / ± 5.0 kHz @ 25 kHz[3]
Hum and Noise	-40 dB (12.5 kHz channel), -45 dB (25 kHz channel)
Conducted Spurious Emissions (TIA603D)	-57 dBm
Analog Sensitivity (12dB SINAD)	0.16 uV
Digital Sensitivity (5% BER)	0.14 uV
Intermodulation (TIA603D)	70 dB
Adjacent Channel Selectivity, (TIA603A)-1T	60 dB (12.5 kHz channel), 70 dB (25 kHz channel)
Adjacent Channel Selectivity, (TIA603D)-2T & (TIA603C)-2T	45 dB (12.5 kHz channel), 70 dB (25 kHz channel)
Spurious Rejection (TIA603D)	70 dB

AUDIO SPECIFICATIONS

Digital Vocoder Type	AMBE+2™
Audio Response	TIA603D
Rated Audio	0.5 W
Audio Distortion at Rated Audio	3%

NOTES
1: Typical battery life, 5/5/90 profile at maximum transmitter power with Bluetooth and Wi-Fi disabled. Actual observed runtimes may vary.
2: Radio only. Specialized low-temperature battery required for operation below 14 °F (-10 °C)
3: Argentina: only digital version
Specifications subject to change without notice. All specifications shown are typical values.
*Check for availability in your country for 25kHz channels

Wi-Fi SPECIFICATIONS

Standards Supported	IEEE 802.11b, 802.11g, 802.11n
Security Protocol Supported	WPA, WPA-2, WEP
Maximum Number of SSIDs	64

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature[2]	-22 °F to +140 °F (-30 °C to +60 °C)
Storage Temperature[2]	-40 °F to +185 °F (-40 °C to +85 °C)
Electrostatic Discharge	IEC 61000-4-2 Level 3
Dust and Water Intrusion	IEC 60529 - IP67
Packaging Test	MIL-STD 810D and E

HAZLOC CERTIFICATION

TIA-4950	UL-Approved for use in Hazardous Locations, Division 1, Class I, II, III, Groups C, D, E, F, G; Division 2, Class 1, Groups A, B, C, D when properly equipped with Motorola UL-Approved battery.

CONNECTION
- VHF Band, 5 W
- UHF Band, 4 W
- 350 Band, 4W
- LKP models: Mono screen, limited keypad, 128 channels
- NKP models: No screen or keypad, 32 channels
- Analog and Digital[3]
- Voice only
- Integrated Wi-Fi
- Canned Text Messaging
- Bluetooth Audio (optional)
- Bluetooth Permanent Discovery Mode (optional)
- Bluetooth Indoor Location Tracking (optional)
- Voice Announcement
- Option Board
- Home Channel Reminder

AUDIO
- Intelligent Audio
- IMPRES Audio
- SINC+ Noise Cancellation (optional)
- Acoustic Feedback Suppressor
- User-Selectable Audio Profiles
- Trill Enhancement
- Switch Speaker

CUSTOMIZATION
- Customized Accessories
- 4 Programmable Buttons (2 for NKP model)

MANAGEMENT
- Radio Management (optional)
- OTAP (optional)
- IMPRES Energy
- IMPRES Battery Management (optional)
- Over the Air Battery Management (optional)

SAFETY
- Lone Worker
- Basic Privacy
- Enhanced Privacy (optional)
- Transmit Interrupt (Decode only)
- Emergency
- Emergency Search Tone
- Remote Monitor (Decode only)
- Radio Disable / Enable (Decode only)
- HazLoc certification (optional)
- Waterproof to IP70
- Rugged to MIL-STD

SYSTEMS
- Dual Capacity Direct Mode
- Conventional
- IP Site Connect
- Capacity Plus Single Site (optional)
- Capacity Plus Multi-Site (optional)

MILITARY STANDARDS

	MIL-STD 810C		MIL-STD 810D		MIL-STD 810E		MIL-STD 810F		MIL-STD 810G	
	METHOD	PROCEDURE	METHOD	PROCEDURE	METHOD	PROCEDURE	METHOD	PROCEDURE	METHOD	PROCEDURE
Low Pressure	500.1	I	500.2	II	500.3	II	500.4	II	500.5	II
High Temp	501.1	I, II	501.2	I/A1, II/A1	501.3	I/A1, II/A1	501.4	I/Hot, II/Hot	501.5	I/A1, II/A1
Low Temp	502.1	I	502.2	I/C3, II/C1	502.3	I/C3, II/C1	502.4	I/C3, II/C1	502.5	I/C3, II/C1
Temp Shock	503.1	I	503.2	A1/C3	503.3	A1/C3	503.4	I	503.5	I-C
Solar Radiation	505.1	II	505.2	I/Hot-Dry	505.3	I/Hot-Dry	505.4	I/Hot-Dry	505.5	I/A1
Rain	506.1	I, II	506.2	I, II	506.3	I, II	506.4	I, III	506.5	I, III
Humidity	507.1	II	507.2	II/Hot-Humid	507.3	II/Hot-Humid	507.4	-	507.5	II/Hot-Humid
Salt Fog	509.1	I	509.2	I	509.3	I	509.4	-	509.5	-
Dust	510.1	I, II	510.2	I, II	510.3	I, II	510.4	I, II	510.5	I, II
Vibration	514.2	VIII/F, W, XI	514.3	I/10, II/3	514.4	I/10, II/3	514.5	I/24, II/5	514.6	I/24, II/5
Shock	516.2	II	516.3	I, IV	516.4	I, IV	516.5	I, IV	516.6	I, IV

REMOTE SPEAKER MICROPHONES

Improve usability with a Remote Speaker Microphone (RSM). Choose from standard, heavy duty and noise-cancelling models, with or without secondary earpiece connector.

ENERGY SOLUTIONS

Make sure your radio is powered and charged properly, with our range of energy solutions. Choose from single and multi-unit chargers, and slim and high capacity batteries.

CARRY SOLUTIONS

However you choose to wear or carry your radio, we have a solution for you. From leather cases to belts and belt clips to bags, straps and pouches.

HEADSETS

In a noisy workplace, you need to protect your workers' hearing. Whether it's heavy duty noise reduction or innovative temple transducer technology , our headsets can help.

COVERT ACCESSORIES

When you need to stay in touch discreetly, choose from our range of covert audio accessories. From clear tube earpieces to virtually invisible wireless in-ear units.

VIBRATING BELTCLIP

When it's unacceptable to miss calls in a noisy environment, equip your radios with a powerful vibrating belt clip for an extra physical alert.

To get connected with MOTOTRBO, please contact your local Motorola representative or visit motorolasolutions.com/MOTOTRBO

*MOTO**TRBO***
REINVENTING
DIGITAL

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